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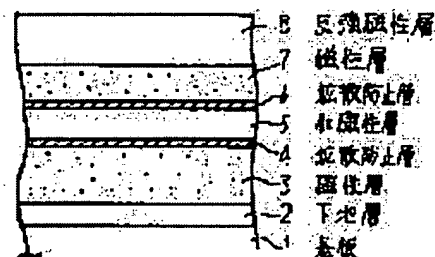
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## (54) MAGNETORESISTIVE EFFECT ELEMENT AND MAGNETIC SENSOR

(57)Abstract:

**PROBLEM TO BE SOLVED:** To improve heat resistivity and environment resistance of a magnetoresistive effect element having a laminated structure of magnetic and non-magnetic layers.

**SOLUTION:** Diffusion preventing layers 4, 6 of Ag are provided between a non-magnetic layer 5 of Cu and magnetic layer 3, 7. The non-magnetic layer 5 is a multi-layer film formed of a thin Cu film and a thin Ag film. Aggregation due to heat treatment does not take place because the thin Ag film is in close contact with the Cu layer. Moreover, Ag makes a good diffusion preventing layer. A large magnetoresistive effect is obtained because Cu is used for the non-magnetic layer 5, and heat resistance is improved because the Ag layer is included. Further, corrosion resistance is improved by providing a corrosion resistive thin metal film between the layers of the multi-layer film.



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